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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,055	06/06/2001	Yoko Iwamiya	208853US0	5631
22850	7590	11/25/2003	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			METZMAIER, DANIEL S	
			ART UNIT	PAPER NUMBER

1712

DATE MAILED: 11/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/874,055

Applicant(s)

IWAMIYA ET AL.

Examiner

Daniel S. Metzmaier

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1-13 are pending. This action is responsive to the amendment filed August 14, 2003.

Claim Objections

1. Claim 8 is objected to because of the following informalities: claim 8 contains two periods. A claim should be drafted in single sentence format. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 3-4, 6, 8-10 and 12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Smith, US 3,962,500. Smith discloses methods of imparting resilience and crease resistance to synthetic fibers by treating said fibers with compositions containing partial hydrolysates of silanes.

It is noted, claims 1-13 lack any recitation of concentrations and have components having overlapping structure, such as the compounds of formula 1 and compounds of formula 3.

Smith (column 1, lines 1-25) discloses treating fibers with silane and partially hydrolyzed silane containing compositions to impart a number of properties including water repellency and lubricity. Smith (column 3, lines 3-27) component (C) as a silane and further discloses the use of partial hydrolysates of said compounds. Smith (lines 22-27) further discloses that partial hydrolysates includes condensates of said partial hydrolysates.

Smith (column 3, lines 35-50) discloses the incorporation of catalyst and other metal organic compounds.

When "a" is zero, the compounds of formula denoted as reference formula (C) reads on the instantly claimed formula 3. When said compounds are partially hydrolyzed, condensation is to be expected as set forth in the Smith reference. Since the components would be expected to be present in an equilibrium reaction mixture and no concentrations of the components are set forth in the instant claims, said equilibrium mixture would have been expected to have at least small amounts of the instantly

claimed oligomers of formula 1 and the silanes and/or oligomers of instantly claimed formula 3.

To the extent Smith differs in the exemplified and/or explicit disclosure of the combination of compounds as set forth in the claims, it would have been obvious to one having ordinary skill in the art at the time of the invention to employ the partial hydrolysates and therefore also partial condensates of the compounds taught in the Smith references for their advantages of treating fibers to impart resilience and crease resistance to said fibers and to impart a number of properties including water repellency and lubricity.

5. Claims 2, 5, 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, US 3,962,500. Smith discloses coated material as set forth in the above anticipations and/or obviousness rejection.

Smith differs from claim 2 in that the surface is formed on said fibers that have been previously dipped in alcohol, dried and irradiated with ultraviolet light. Said steps are product by process steps, which have not been shown to impart a patentable distinction to the coated materials.

Furthermore, applicants set forth in the paragraph bridging pages 17 and 18 that the fibers are treated with isopropyl alcohol and dried at temperatures of up to 100° C. Said alcohol would evaporate and would not be present in the final material and the irradiation does not distinguish said material.

It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ a solvent cleaning and drying prior to coating the fibers.

Surface preparation, eg, cleaning is conventional practice in the coating art and would have been obvious to one of ordinary skilled in the art at the time of applicants' invention.

To the extent Smith differs from claims 5, 7 and 11, Smith (column 3, lines 3-27) clearly contemplates the use of alkenyl or phenyl substituted silanes and partial hydrolysates thereof. It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ alkenyl or phenyl substituted silanes, partial hydrolysates, and mixtures thereof as obvious reaction mixtures for treating fibers taught in the Smith reference. The combination thereof would have been obvious for their advantages of treating fibers to impart resilience and crease resistance to said fibers and to impart a number of properties including water repellency and lubricity.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-13 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 and 13-15 of U.S. Patent

No. 6,403,183 in view of Marwitz et al, US 3,671,485. Although the conflicting claims are not identical, they are not patentably distinct from each other because said claims differ in the substrate treated and the prior art recognizes the treatment of said substrates interchangeably for the food packaging art.

6,403,183 discloses and claims (claims) a transparent article comprising a cellophane substrate coated on at least one surface with the instantly claimed coating compositions. 6,403,183 differs in the substrate being coated.

Marwitz et al (column 1, lines 1 et seq) discloses silane based coatings for treating paper and films among other substrates for food packaging. Marwitz et al (column 4, lines 7-20) teaches a number of materials to be treated include paper, fibers, foil sheet, wood and organic plastics.

These references are combinable because they teach treatment of food packaging with silane based compositions and Marwitz et al is cited on the 6,403,183 as prior art. It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ the compositions of 6,403,183 for treatment of the fiber and paper food packaging as an prior art recognized substrate used in food packaging.

Response to Arguments

8. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

9. Applicants' request to hold the issue of Obviousness Double Patenting rejection in abeyance has been noted. Said holding in abeyance may raise an issue of timeliness and applicants are encouraged to remove said rejection if possible.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (703) 308-0451. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson can be reached on (703) 308-2340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink, reading "Daniel S. Metzmaier". The signature is fluid and cursive, with the first name "Daniel" and last name "Metzmaier" clearly distinguishable.

Daniel S. Metzmaier
Primary Examiner
Art Unit 1712

DSM